USCMS Engineer Status Report for January 2004

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1 Work Performed This Month

DDD:

I finalized the Vector, Map, RotationSequence and other elements mentioned before. These files were checked in to CVS and I sent some release notes to Martin Liendl. Implemented a new element in the parser, TruncTubs which is a tube section which is cut along a plane parallel to the axis of the tube section. This was needed for the preshower algorithm implementation.

I started writing a some standard XML test files and some code to go with them in order to test the parser more easily when changing the DDL Schema and the parser. This was interrupted by the new element mentioned above but is well along the way.

I also started to look at the HCAL Geant4 code that Sunanda Banerjee sent me in order for me to start working on or helping to implement the HCAL detector description using the new DDD Algorithm plugin. This work has been progressing very slowly. By the end of January I had made little progress.

Conditions DB:

Read a little bit and after hearing about a workshop at CERN (on Jan. 29th I was informed of this) I started planning a trip to CERN.

User Support:

Worked more with students on helping them run particles through the CMS software (Pythia -¿ CMSIM/OSCAR -¿ ORCA).

2 Plans For Next Month

DDD:

Work on the HCAL "example" of a DDD algorithm. Hopefully get this going faster than so far. It is not trivial. I may write converters along the way to take the Geant4 "geometry files" of Sunanda and produce XML files.

Conditions DB:

I will be attending the Feb. 23-25 Conditions DB workshop at CERN. I hope to also work on some of the other projects while I am there for that week.

User Support:

Continue to work with students and on the cluster as time allows.

3 Longer Term Plans

Revisit the documentation of the XML in the DDD as well as continue to work on user support, maintenance and enhancements; particularly in light of the new elements and some changes in the structure of the overall XML documents.

Look at the current status of the elements like Numeric, String, Vector, Map and make sure that they are usable in any element which might be able to use such parameters.

Conditions DB:

Continue to work as much as possible with those involved in design and implementation of the Conditions Database for CMS.

User Support

Continue to work with students. Install CMS software on the UC Davis CMS Cluster.